



## Legislation Text

File #: 59194, Version: 1

### Fiscal Note

The proposed resolution amends the 2020 Stormwater Utility Operating Budget to increase the budget for consulting services by \$700,000 to fund additional watershed studies as part of the City's flood mitigation efforts. The 2020 Adopted Operating Budget included \$700,000 in funding for watershed studies, with a projected rate increase of approximately 10%. This funding will impact the Utility's rates with a projected additional increase of approximately 3%, resulting in an overall increase of approximately 13% in 2020.

\$700,000	84110-54645
(\$700,000)	84110-48510

### Title

Amending the 2020 Stormwater Utility Operating Budget to fund additional watershed studies for the Willow Creek Watershed and the Yahara River/Isthmus Watershed.

### Body

#### PREAMBLE

The City of Madison Engineering Division is proposing to continue the work on watershed and flood studies in response to the extreme rain events over the past several years, and expand that work into additional watersheds. The August 2018 historic event highlighted the need for a comprehensive approach to Stormwater management. These studies are designed to identify deficiencies in the storm system, complete alternatives analysis for flood mitigation solutions, estimate the cost of those solutions, and prioritize the options for future budget cycles.

WHEREAS, in 2019, the Stormwater Utility initiated an extensive and comprehensive series of studies to look at flood mitigation potential on the west and near westside of Madison. The areas studied include the Stricker's Mendota, Spring Harbor, West Wingra, Pheasant Branch, McKenna Greentree, East Badger Mill Creek and Dunn's Marsh Watersheds, and;

WHEREAS, these seven studies were funded under the Citywide Flood Mitigation Program, and;

WHEREAS, The Stormwater Utility had invested in InfoSWMM, a modeling software used to perform highly technical and advanced modeling of hydrology and hydraulics of the stormwater systems and used to determine flood risks, and;

WHEREAS, during the course of the studies it was identified that this software had unforeseen limitations that limited the ability to perform complex modeling that are present in urban watersheds, and;

WHEREAS, included as part of the ongoing watershed studies, the software used for the studies was migrated over to XPSWMM, a more stable platform for the complex nature of these analysis, and;

WHEREAS, The Stormwater Utility was able to change software packages at no additional cost, however work performed by Consultants using the InfoSWMM platform required additional work to migrate existing work to the new software package, adding cost to the studies, and;

WHEREAS, in 2019, the Stormwater Utility completed several large public works contracts under the Citywide

Flood Mitigation Program to address the city's flood mitigation goals, including the *Southwest Bikepath Culvert Replacement at Waite Circle - 2019*, *McKenna Boulevard Flood Mitigation*, and *Hawks Landing Flood Mitigation South - 2019*, and;

WHEREAS, the costs of these public works contracts in 2019 came in higher than originally budgeted, leaving a deficit in the Citywide Flood Mitigation Program, and;

WHEREAS, in 2019, the Citywide Flood Mitigation Program funded work for high level analysis of a portion of the Willow Creek watershed to help inform decisions related to the flood mitigation options for the University Avenue Reconstruction project, and that also informed the feasibility study for a large diameter tunnel that was contemplated as a flood mitigation effort in this corridor, and;

WHEREAS, In early 2019, when the initial round of watershed studies were contemplated and bid, the use of Distributed Green Infrastructure (DGI) as a potential partial solution was not fully vetted as options. As the studies progressed, the requirements and methods of analysis for use of DGI were created and completed by city staff, and

WHEREAS, inclusion of this analysis was added to the contracts of the consulting engineers performing the studies resulting in additional costs, and;

WHEREAS, the additional analysis will be valuable in determining the balance of DGI and Grey Infrastructure used to address flood mitigation efforts, however this the existing contracts will be required to be amended to include this work, and;

WHEREAS, part of the budgeting process for 2020 the watershed studies were shifted to the Operating Budget with approximately \$1M worth of funding budgeted. Approximately \$220,000 of that funding covers existing deficit in the Citywide Flood Mitigation Program Budget that was shifted to the Stormwater Utility Operating budget, leaving reduced funds for available the proposed watershed studies to be started in 2020, and;

WHEREAS, the projected additional costs for amending existing contracts will impact the budget available to complete new studies leading to the Stormwater Utility proposing to scale back on the four studies that were originally planned/budgeted, and;

WHEREAS, in 2020, the Stormwater Utility is now proposing to advance two (2) watershed studies: the Willow Creek Watershed Study, which will be completed in parallel to design for the reconstruction of University Avenue, and the Yahara River/Isthmus Watershed Study in advance of key street reconstruction projects planned in that area, and;

WHEREAS, these two studies are deemed to be the most critical to allow work to be prioritized with other planned projects and to assist with determination of flood risk in the Isthmus and near east side associated with both high lake levels experienced in 2018 and 2019.

NOW, THEREFORE, BE IT RESOLVED, that the 2020 Stormwater Utility Operating Budget be amended to increase consulting services by \$700,000 with an equivalent increase in fund balance applied.